



Is Winter Over

We Might Be Able to Stick A Fork In It?

April 5, 2023
10:30 AM



Briefing Content

- Snowfall Totals and Departures To Date
- Precipitation Totals and Departures To Date
- Current Drought Status
- 4" Soil Temperatures
- Accumulated Winter Season Severity Index
- Omaha AWSSI
- Lincoln AWSSI
- Norfolk AWSSI
- Average Last Snowfall and Latest Snowfall
- 6-10 Day Climate Outlook
- 8-14 Day Climate Outlook
- GEFS 15 Day Temperature Forecast





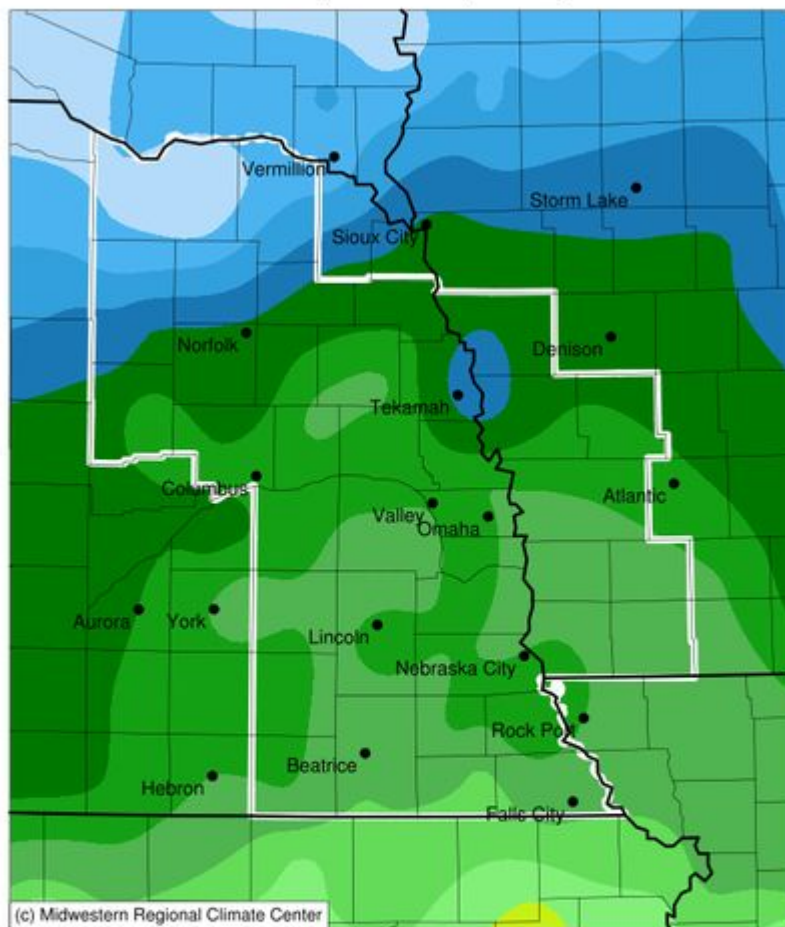
Winter Weather Overview

April 5, 2023
10:30 AM

Accumulated Snowfall and Departure from Normal October 1 - April 5

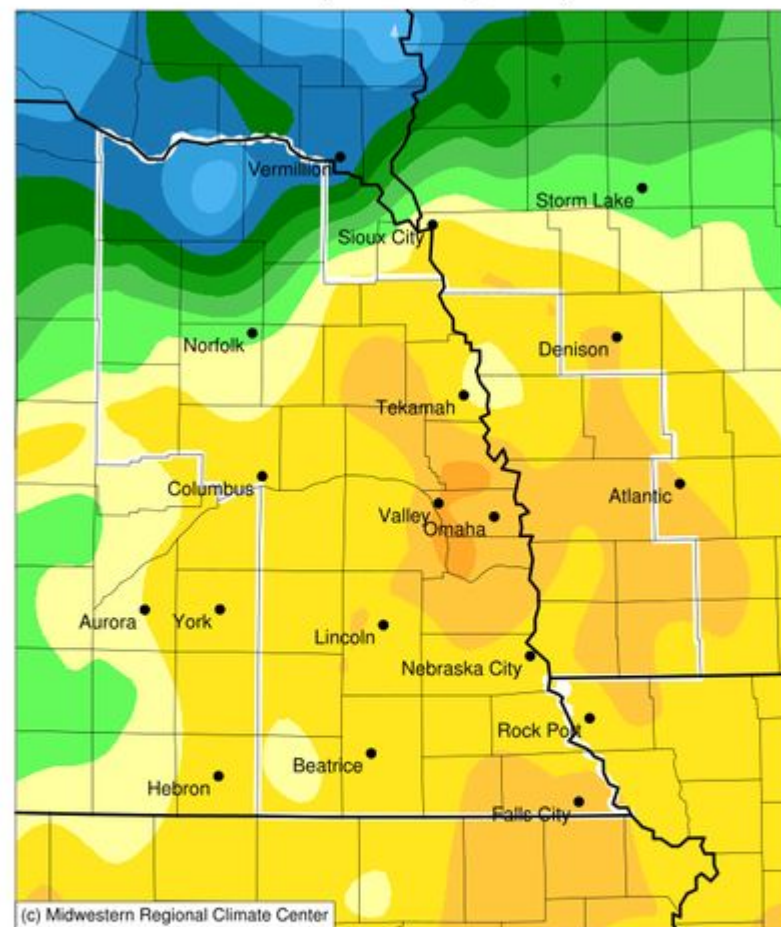
Accumulated Snowfall (in)

October 01, 2022 to April 05, 2023



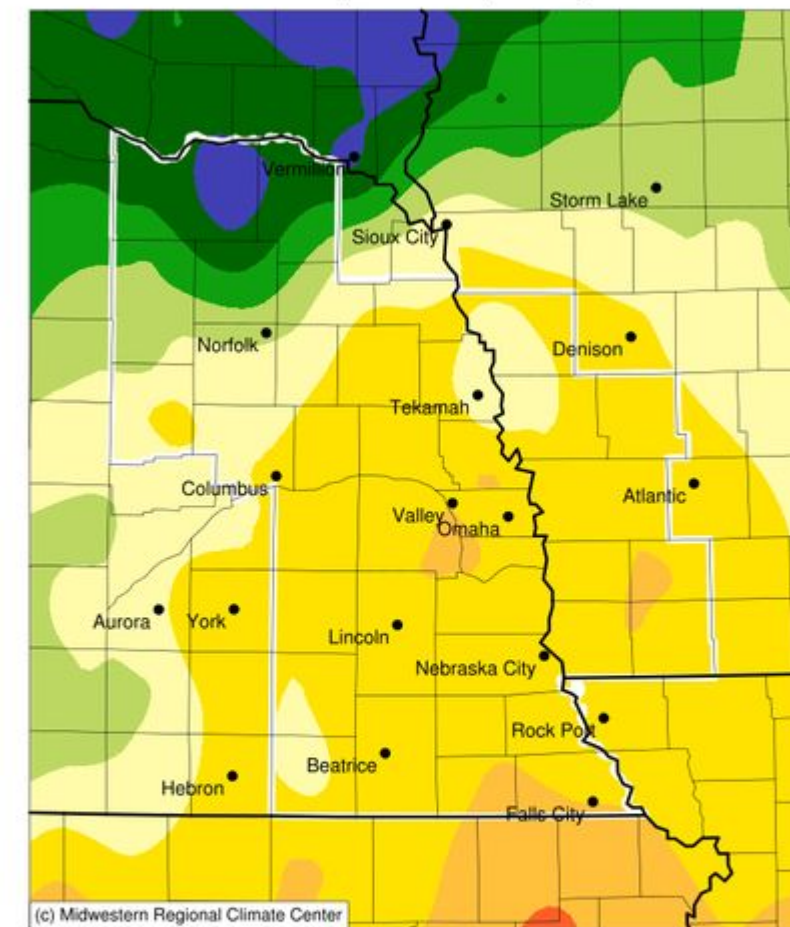
Accumulated Snowfall (in): Departure from 1991-2020 Normals

October 01, 2022 to April 05, 2023



Accumulated Snowfall (in): Percent of 1991-2020 Normals

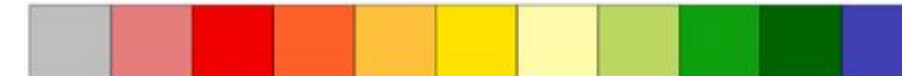
October 01, 2022 to April 05, 2023



0.01 1 2.5 5 7.5 10 15 20 30 40 50 60 80
Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI, Midwest Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 4/5/2023 8:04:54 AM CDT



-15 -10 -5 0 5 10 15 20 25 30 35
Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI, Missouri FSA, Missouri Mesonet, Midwest Regional Climate Center
cli-MATE: MRCC Application Tools Environment
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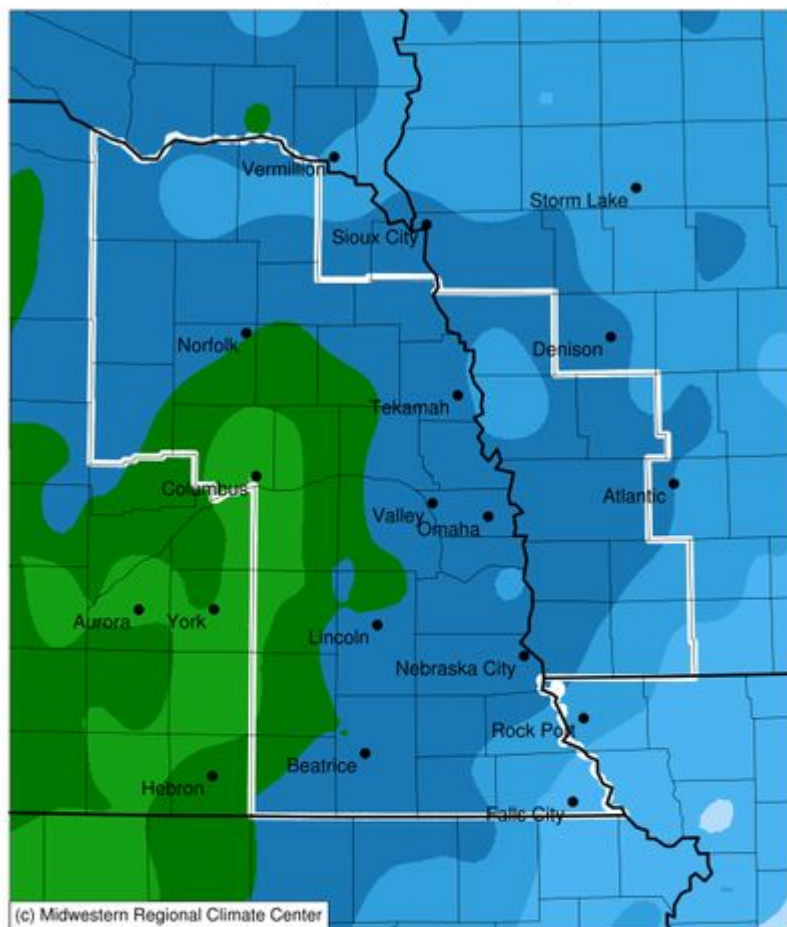


Winter Weather Overview

April 5, 2023
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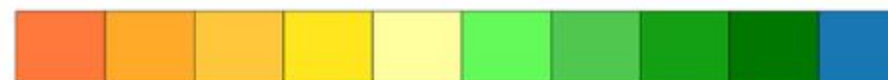
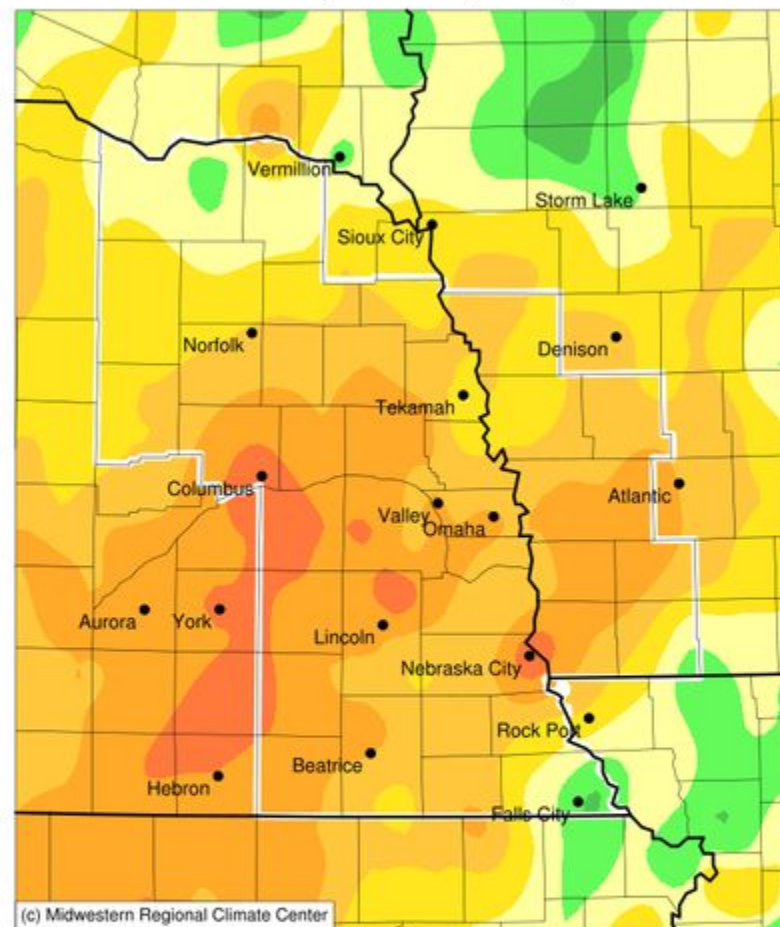
Accumulated Precipitation and Departure from Normal October 1 - April 5

Accumulated Precipitation (in)
October 01, 2022 to April 05, 2023



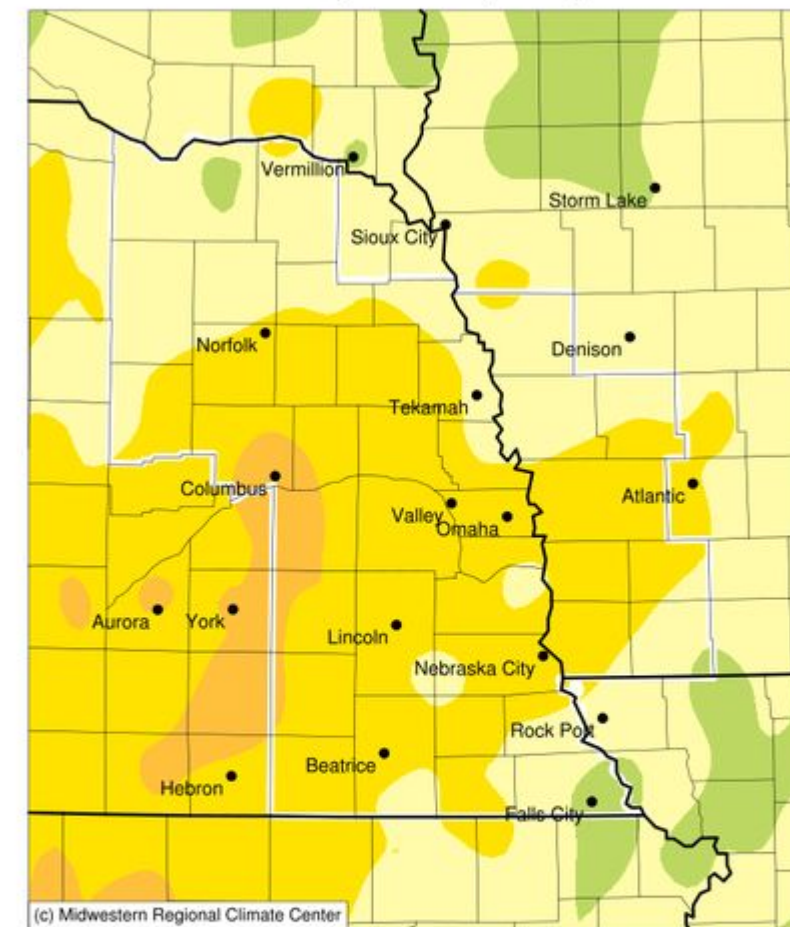
Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI, Missouri FSA, Missouri Mesonet, Midwest Regional Climate Center
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Accumulated Precipitation (in): Departure from 1991-2020 Normal Accumulated Precipitation (in): Percent of 1991-2020 Normals
October 01, 2022 to April 05, 2023



Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI, Midwest Regional Climate Center
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October 01, 2022 to April 05, 2023



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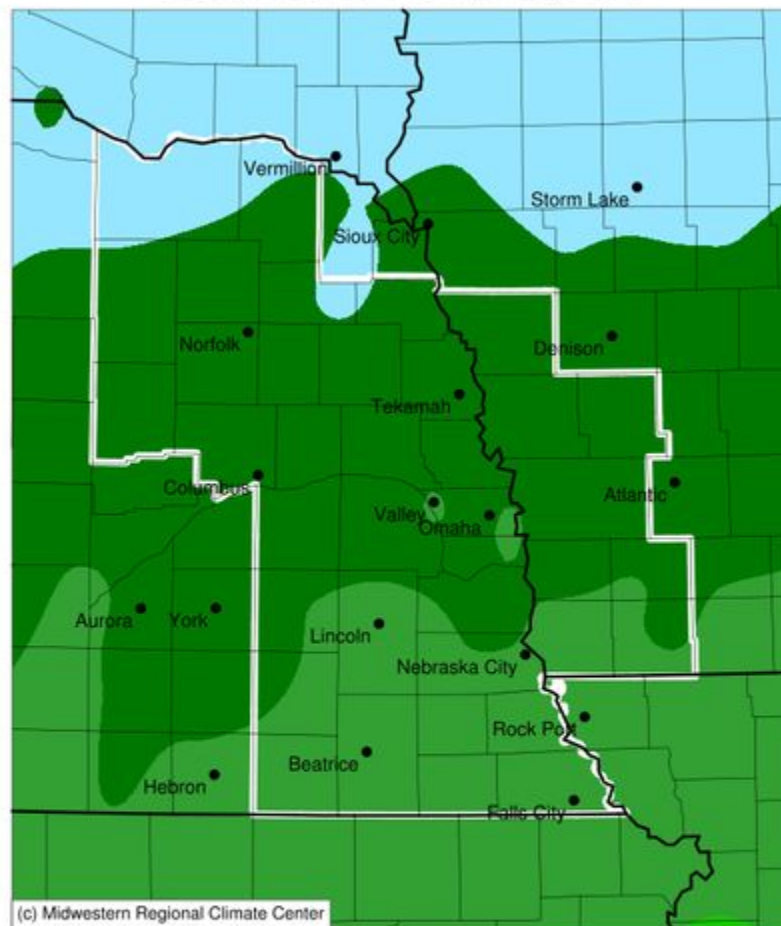


Winter Weather Overview

April 5, 2023
10:30 AM

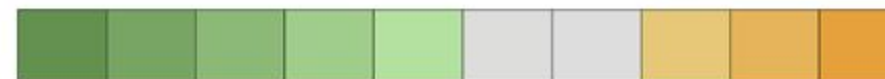
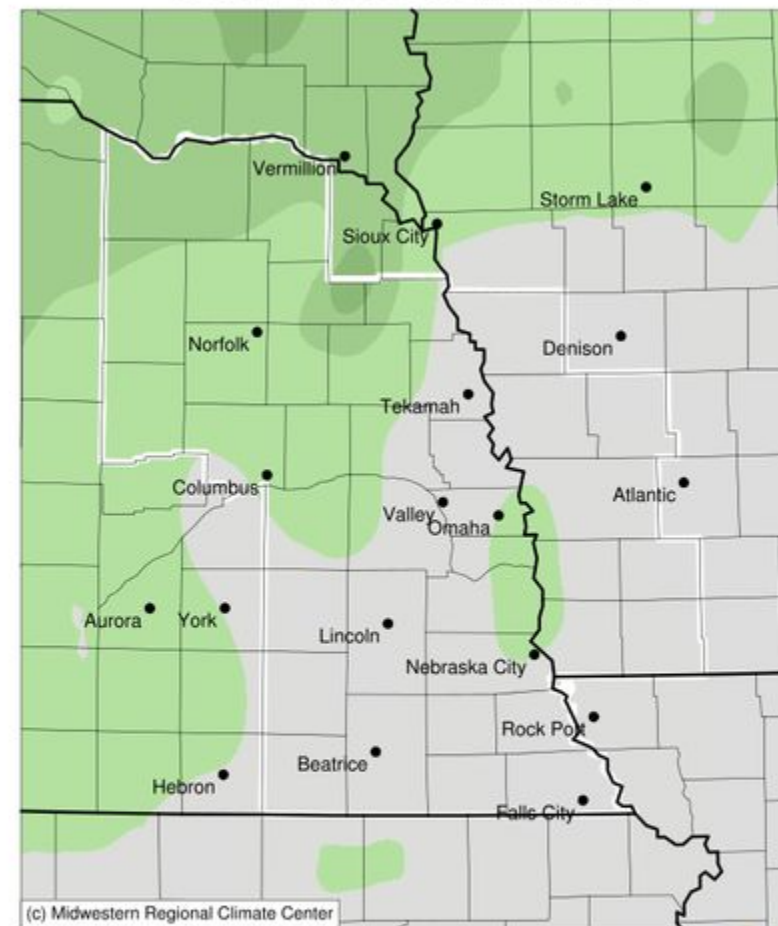
Average Temperature and Departure from Normal October 1 - April 5

Average Temperature (°F)
October 01, 2022 to April 05, 2023



15 20 25 30 35 40 45
Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI,
Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
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Average Temperature (°F): Departure from 1991-2020 Normals
October 01, 2022 to April 05, 2023



-5 -4 -3 -2 -1 0 1 2 3
Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI,
Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 4/5/2023 11:00:12 AM CDT





Winter Weather Overview

April 5, 2023
10:30 AM

Temperature, Precipitation and Snowfall Departures October 1 - April 5

Location	Average Temperature	Departure	Precipitation	Departure	Snowfall	Departure
Omaha, NE	35.3°	-0.7°	6.03"	-2.87"	13.8"	-12.4"
Lincoln, NE	36.5°	-0.7°	4.75"	-3.37"	14.3"	-10.6"
Norfolk, NE	32.9°	-1.1°	4.73"	-2.69"	28.6"	+0.5"





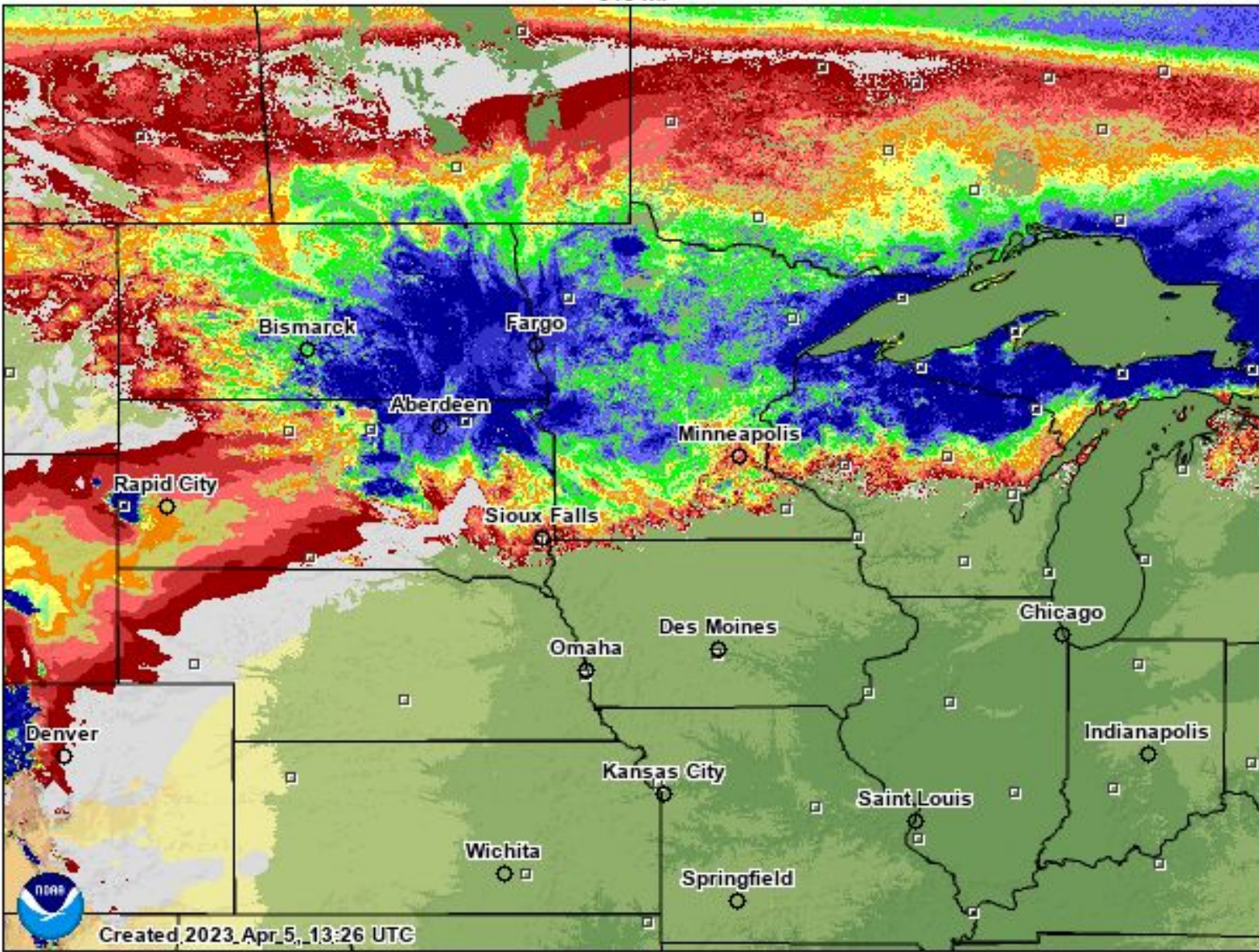
Current Northern Plains Snow Depth

April 5, 2023
10:30 AM

Modeled Snow Depth (Shallow-snow Legend) forecasted for 2023 April 5, 16:00

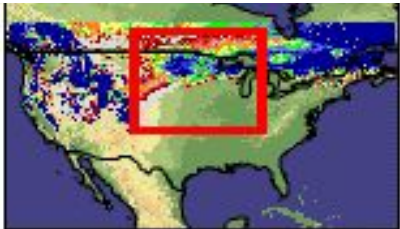
UTC

913 mi



Created 2023_Apr_5_13:26 UTC

1217 mi



Inches of depth



Not Estimated

Elevation in feet



National Oceanic and
Atmospheric Administration
U.S. Department of Commerce

<https://www.nohrsc.noaa.gov/>

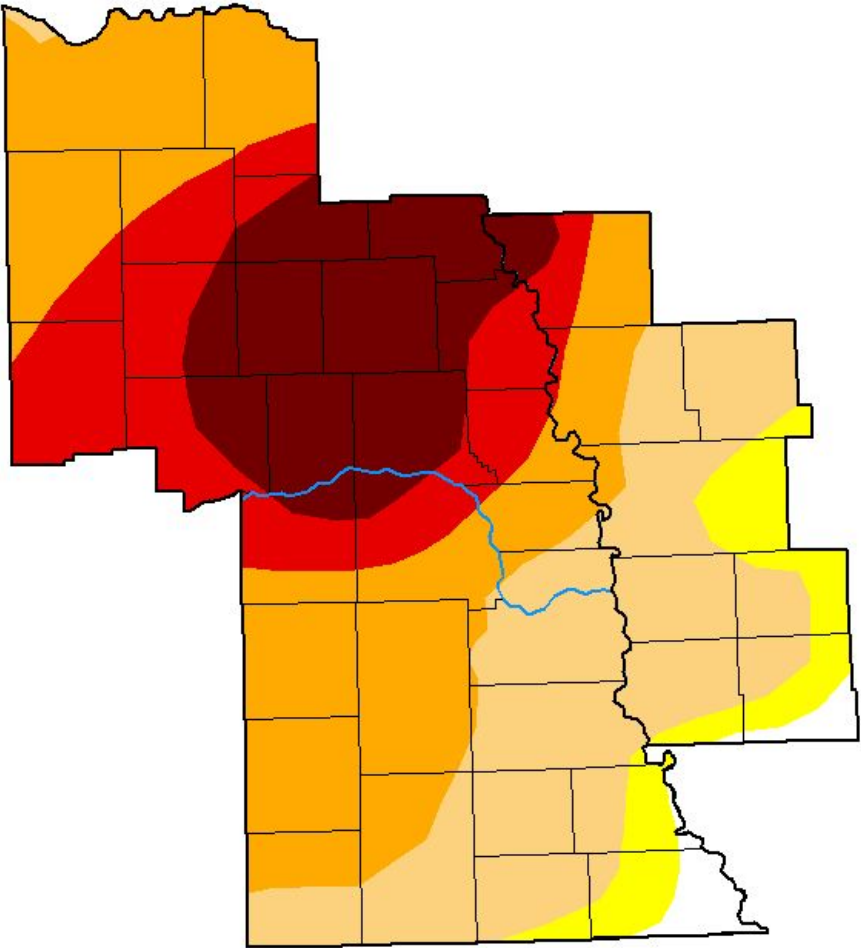
National Weather Service
Omaha/Valley,NE



Current Drought Status

April 5, 2023
10:30 AM

U.S. Drought Monitor Omaha/Valley, NE WFO



March 28, 2023
(Released Thursday, Mar. 30, 2023)
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	2.02	97.98	91.43	64.96	33.48	16.86
Last Week 03-21-2023	2.02	97.98	91.43	64.44	33.48	16.86
3 Months Ago 12-27-2022	0.00	100.00	99.29	77.57	47.08	24.75
Start of Calendar Year 01-03-2023	0.00	100.00	99.29	77.57	47.08	24.75
Start of Water Year 09-27-2022	0.00	100.00	88.12	56.59	27.35	12.46
One Year Ago 03-29-2022	15.09	84.91	71.49	41.12	2.74	0.00

Intensity:

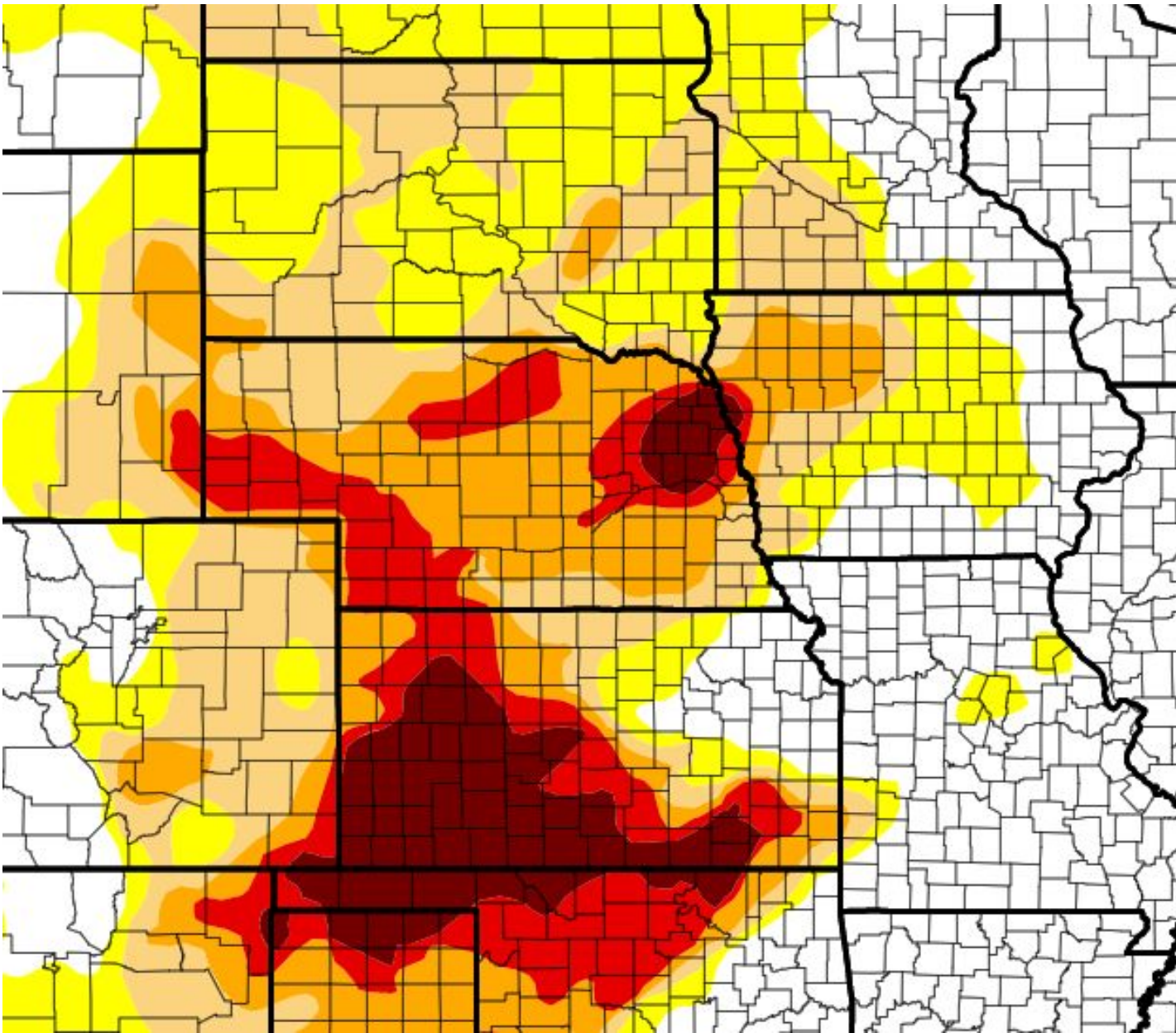
None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions.
Local conditions may vary. For more information on the
Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:
Curtis Riganti
National Drought Mitigation Center



droughtmonitor.unl.edu



National Oceanic and
Atmospheric Administration
U.S. Department of Commerce

<https://droughtmonitor.unl.edu/>

National Weather Service
Omaha/Valley, NE

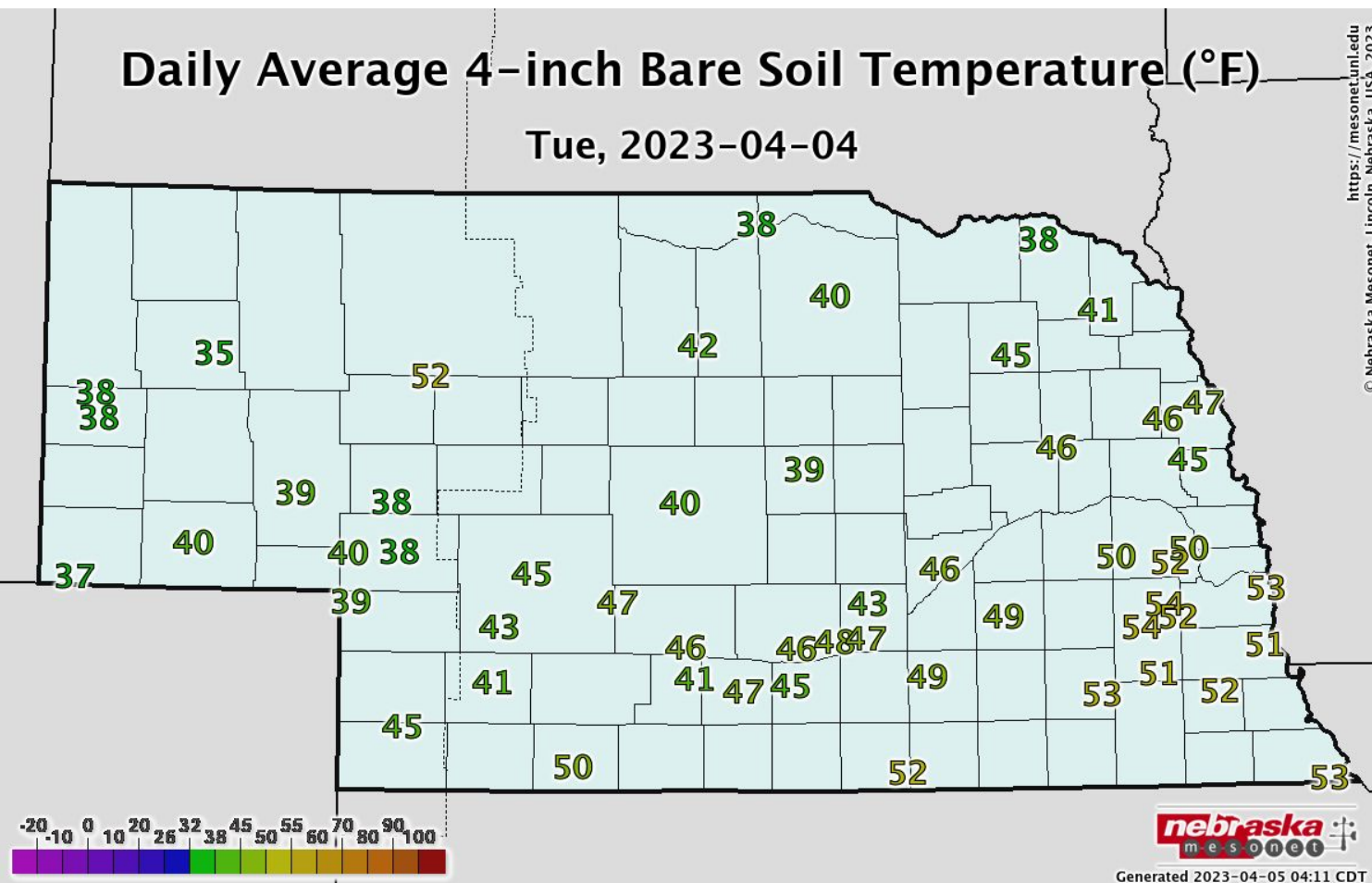


4" Soil Temperatures

April 5, 2023
10:30 AM

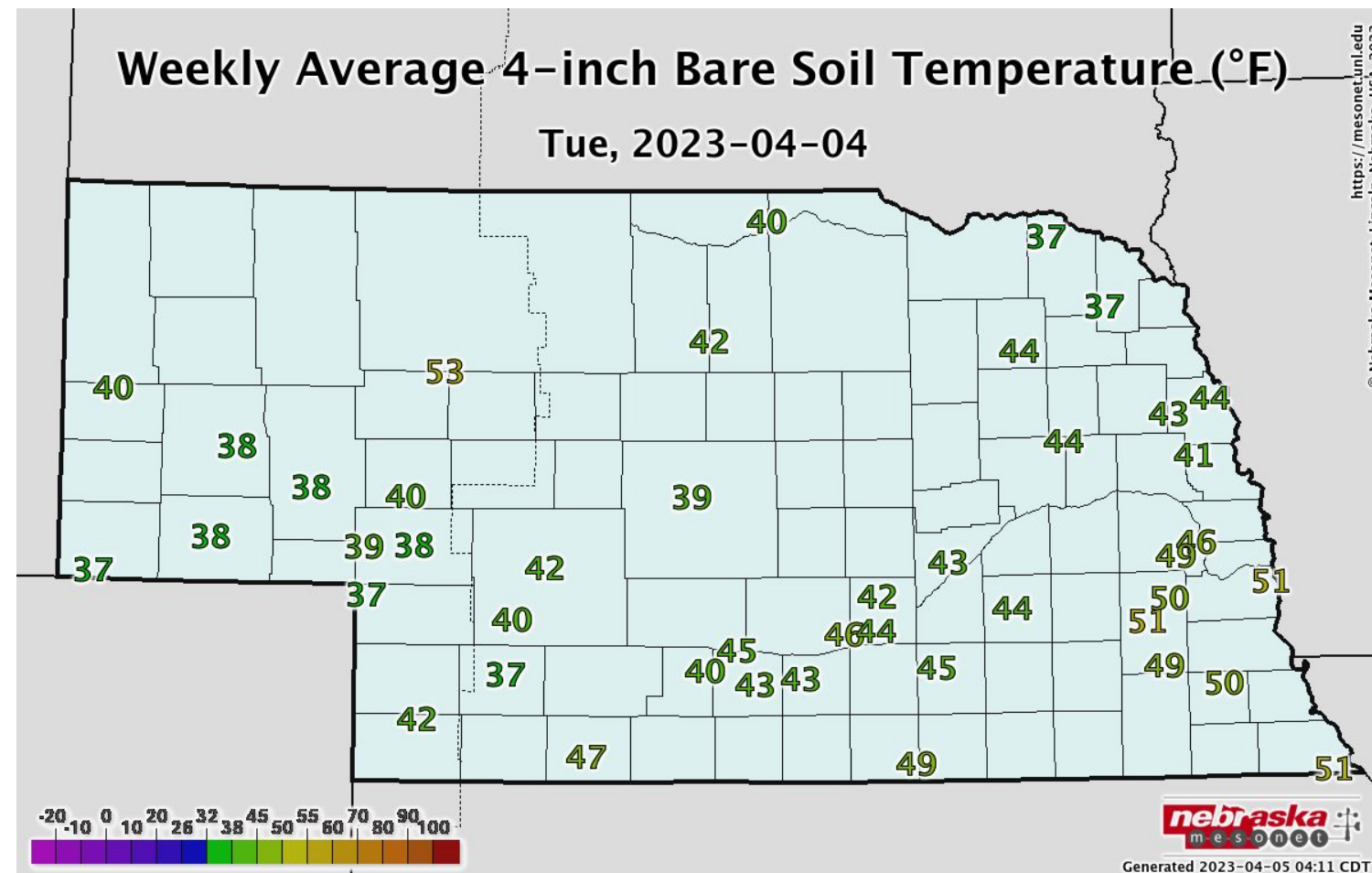
Daily Average 4-inch Bare Soil Temperature (°F)

Tue, 2023-04-04



Weekly Average 4-inch Bare Soil Temperature (°F)

Tue, 2023-04-04





Accumulated Winter Season Severity Index

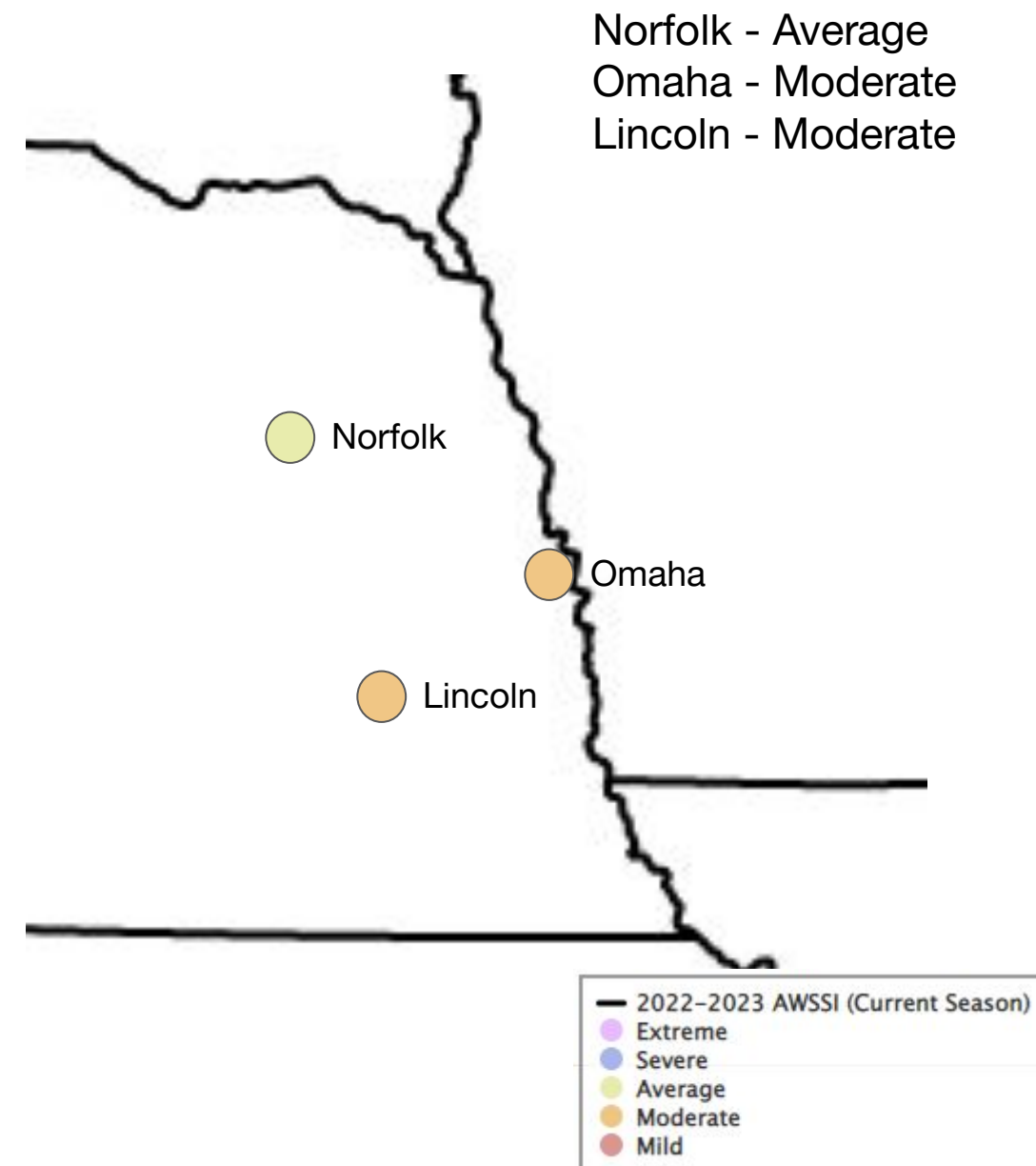
April 5, 2023
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AWSSI

- Objectively index winter conditions
- Use commonly available data—max/min temperature, snowfall, and snow depth or precipitation
- Create a historical database of AWSSI for any location with daily temperature, snow, and precipitation data
- Allow comparisons of season to season severity at one location in the context of the climatology of that location, or between locations
- Use as a baseline to scale subjective impacts such as those to snow removal, commerce, and transportation
- Apply to multiple users and their needs

Limitations

- Does not include wind (e.g. wind chill, blowing snow)
- Does not include mixed precipitation or freezing rain explicitly



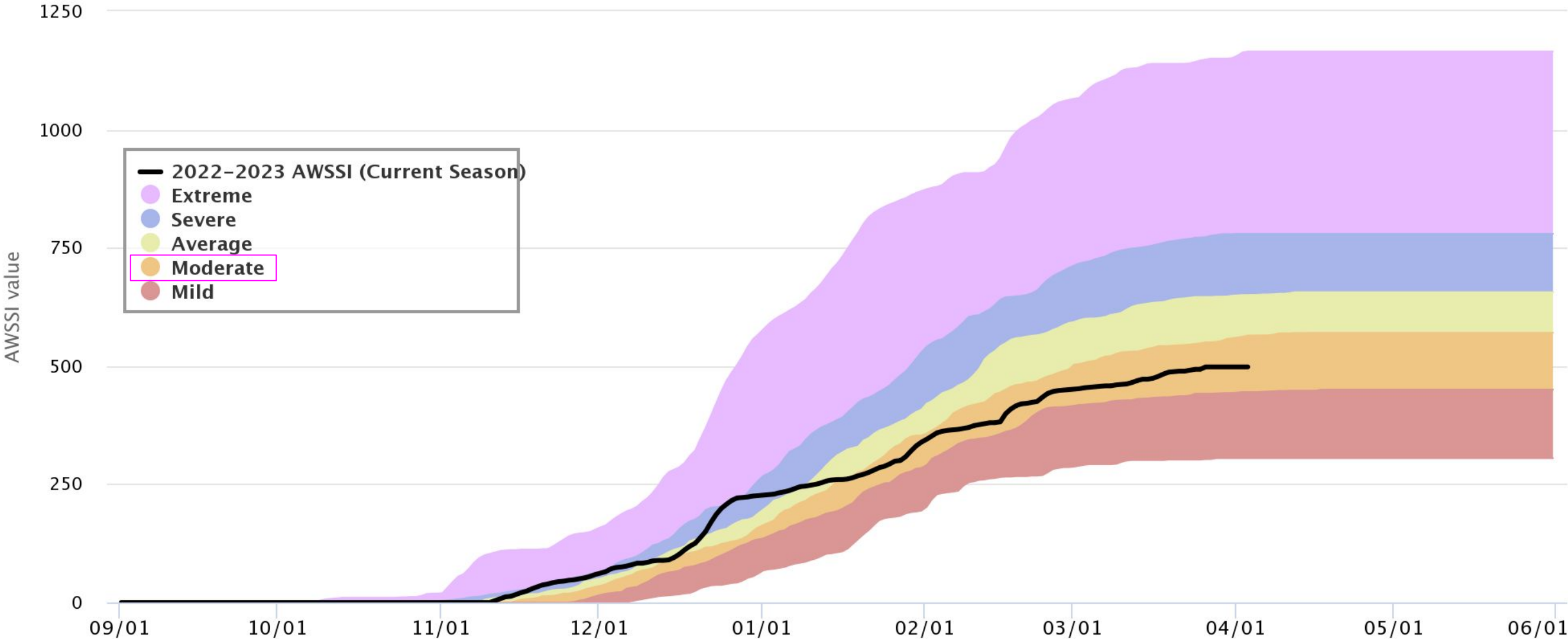


Omaha, NE AWSSI

April 5, 2023
10:30 AM

2022-2023 AWSSI: "NE - Omaha"

Season: 2022-11-11 to 2023-03-26, 136 days



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Click and drag to zoom



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<https://mrcc.purdue.edu/research/awssi/indexAwssi.jsp>

National Weather Service
Omaha/Valley, NE

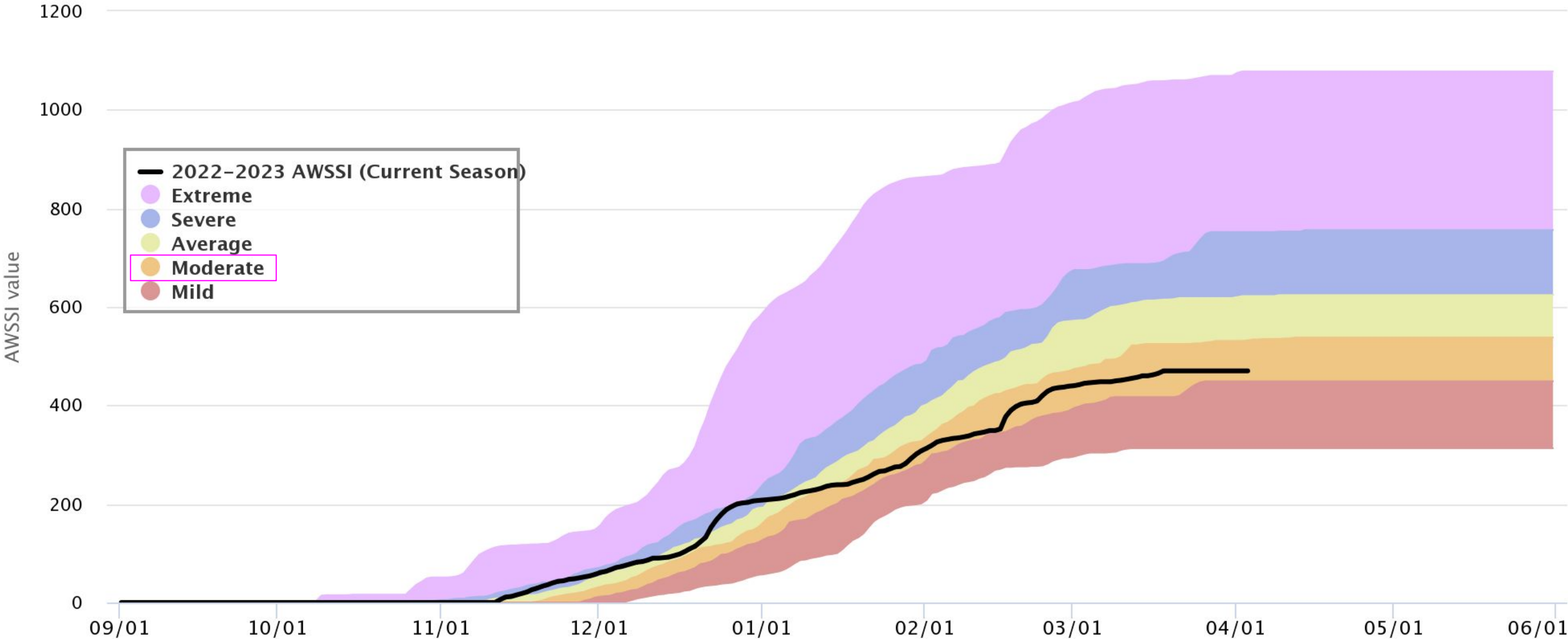


Lincoln, NE AWSSI

April 5, 2023
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2022-2023 AWSSI: "NE - Lincoln"

Season: 2022-11-12 to 2023-03-18, 127 days



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<https://mrcc.purdue.edu/research/awssi/indexAwssi.jsp>

National Weather Service
Omaha/Valley, NE

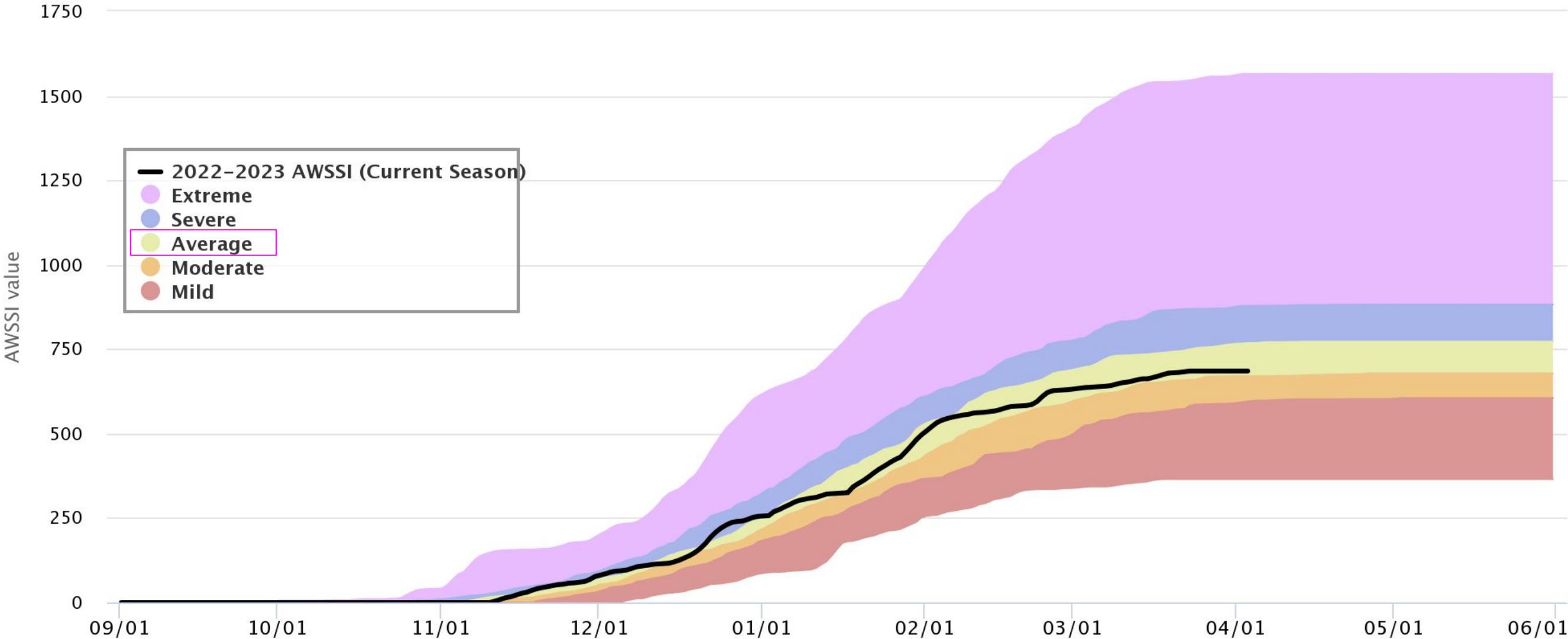


Norfolk, NE AWSSI

April 5, 2023
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2022-2023 AWSSI: "NE - Norfolk"

Season: 2022-11-11 to 2023-03-23, 133 days



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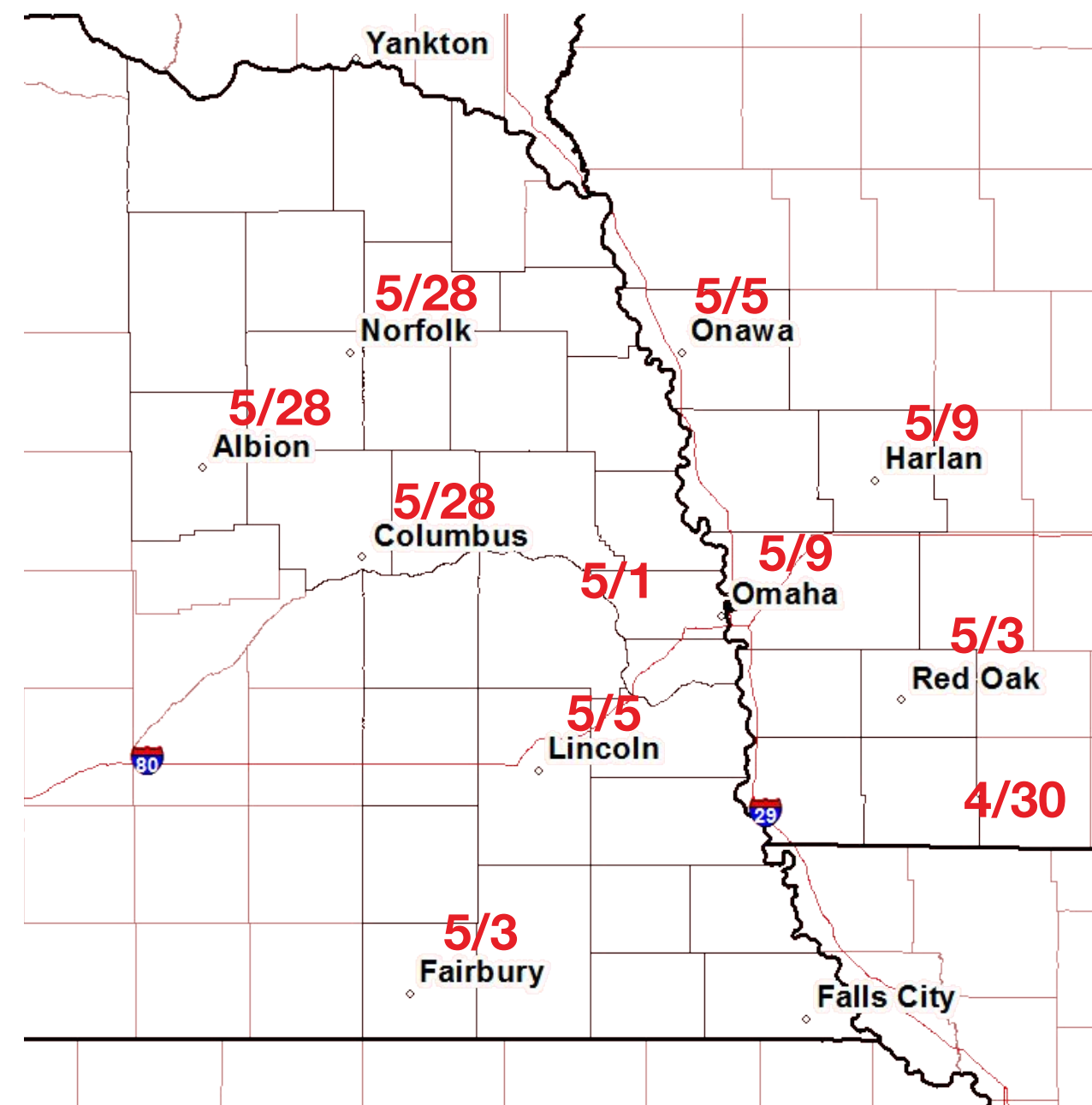
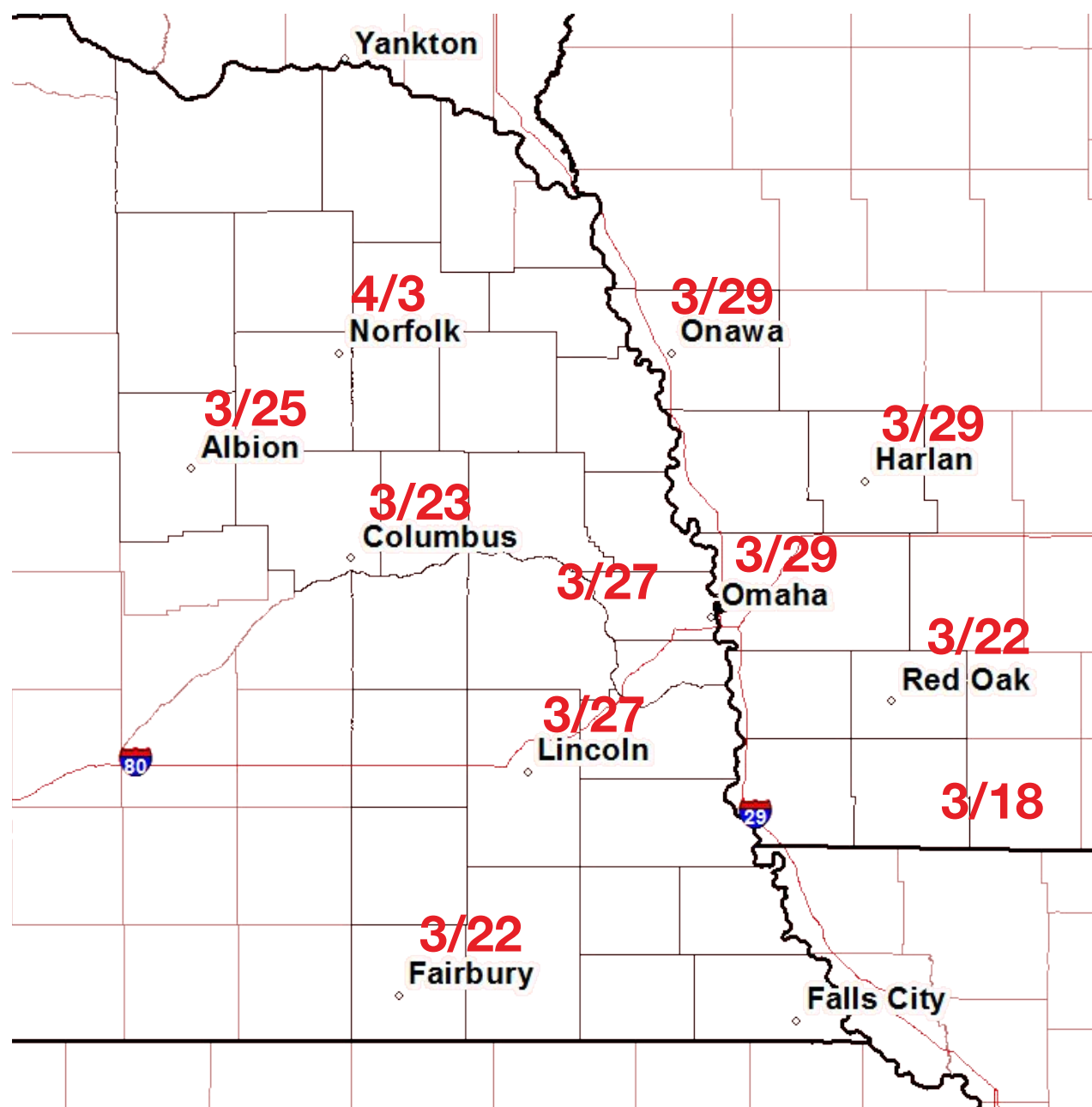
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Average Last Snow and Latest Snow

April 5, 2023
10:30 AM





Climate Outlooks

6-10 Day Outlook

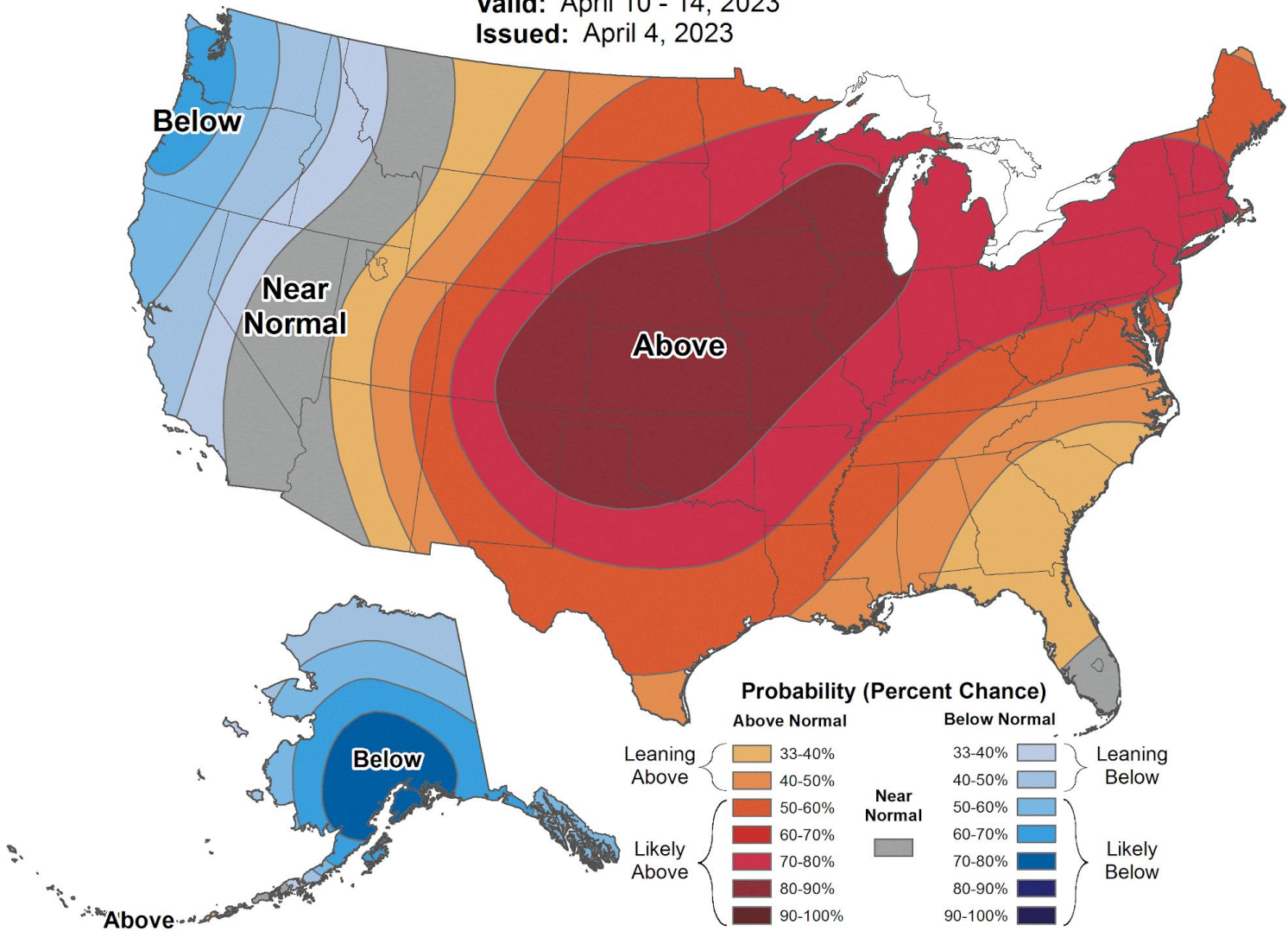
April 5, 2023
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6-10 Day Temperature Outlook



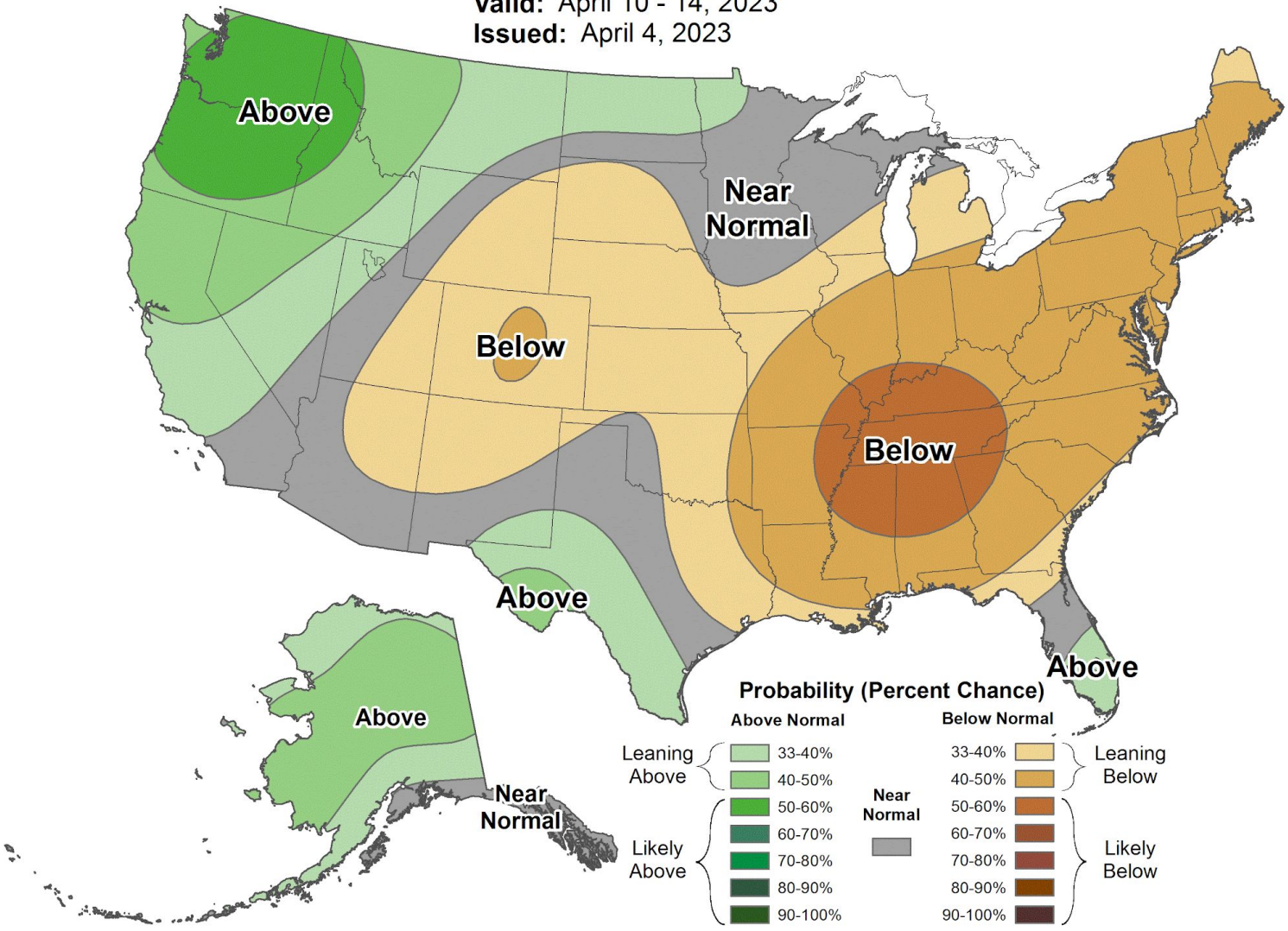
Valid: April 10 - 14, 2023
Issued: April 4, 2023



6-10 Day Precipitation Outlook



Valid: April 10 - 14, 2023
Issued: April 4, 2023





Climate Outlooks

8-14 Day Outlook

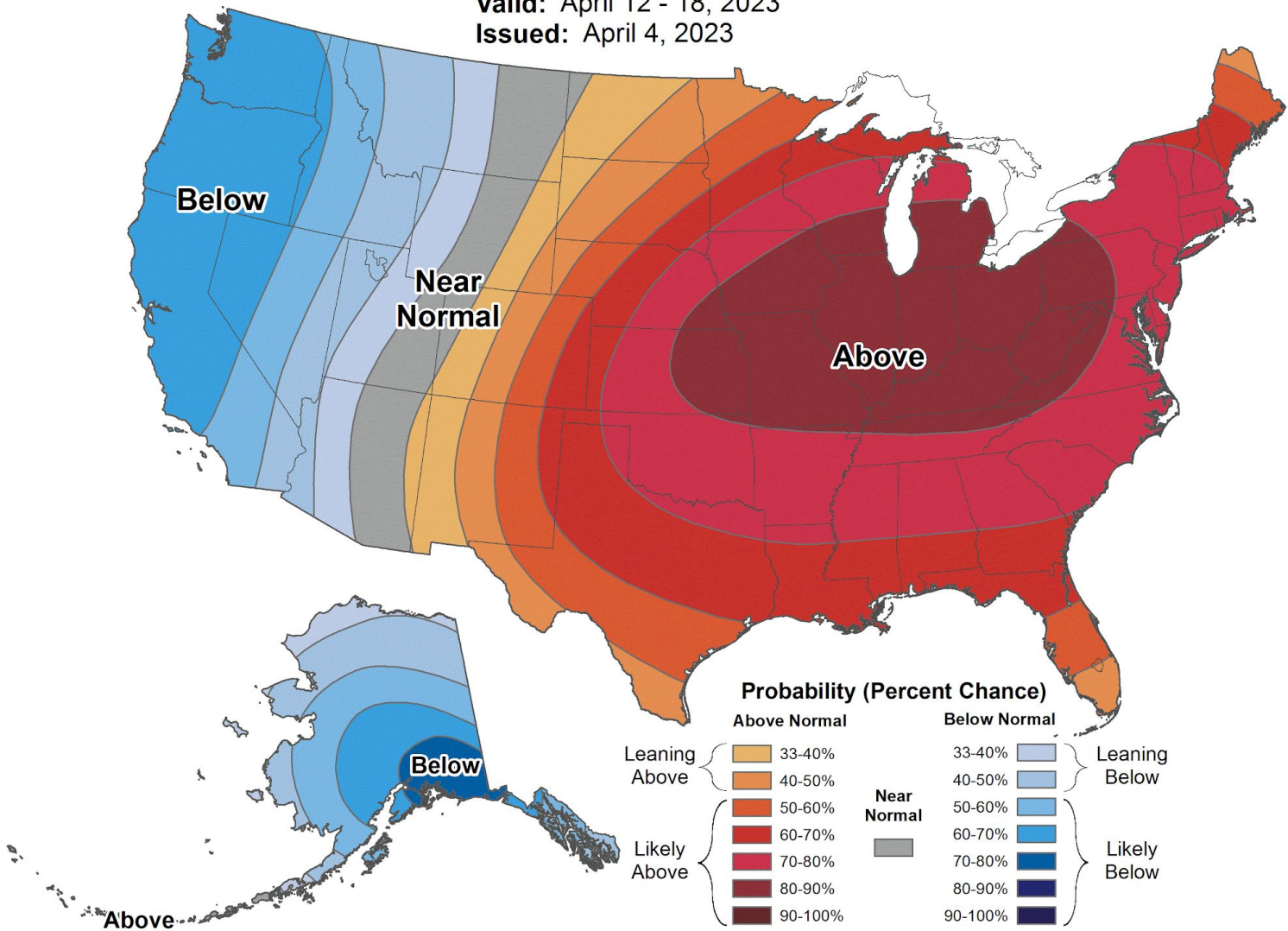
April 5, 2023
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8-14 Day Temperature Outlook



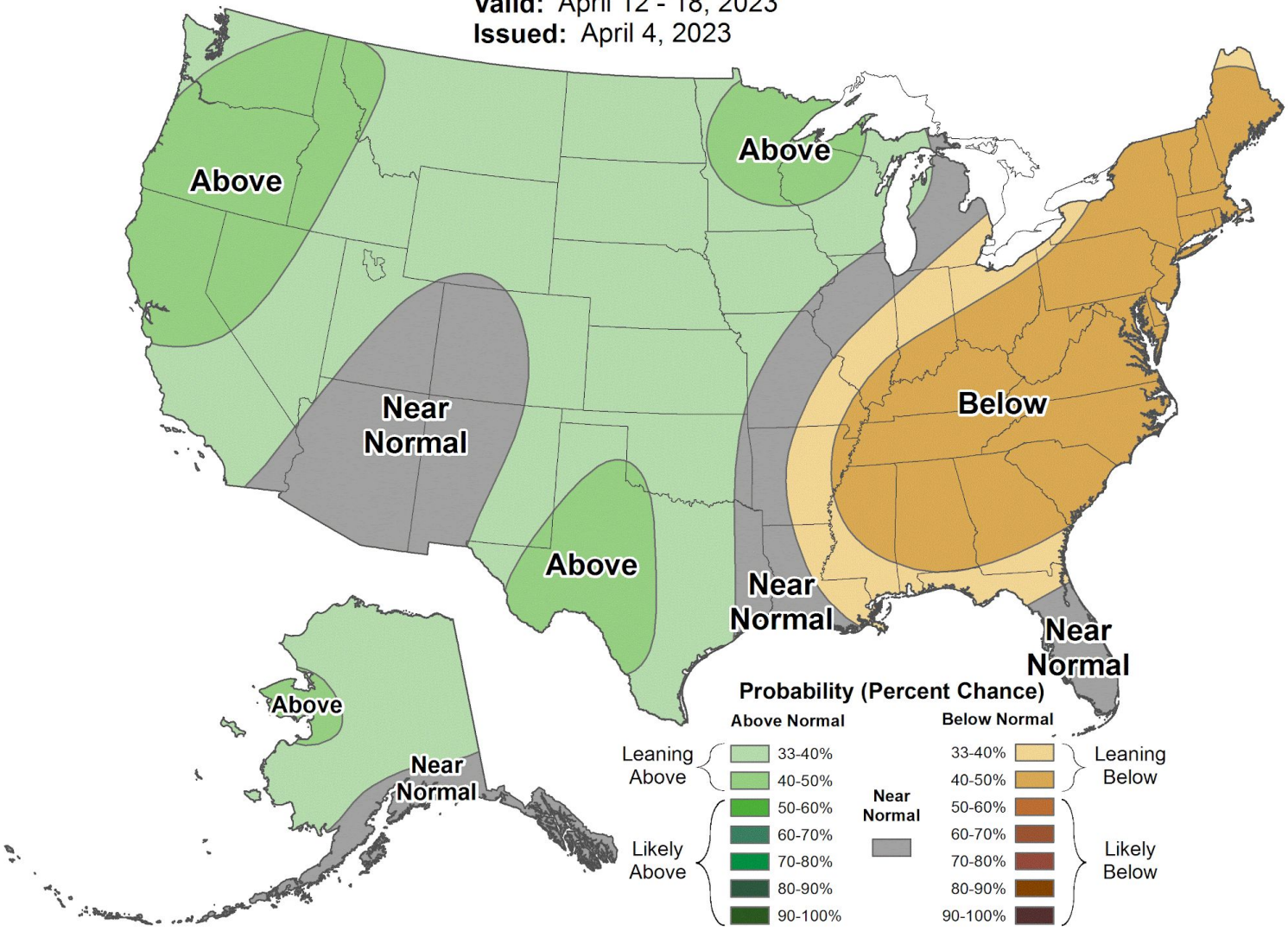
Valid: April 12 - 18, 2023
Issued: April 4, 2023



8-14 Day Precipitation Outlook



Valid: April 12 - 18, 2023
Issued: April 4, 2023



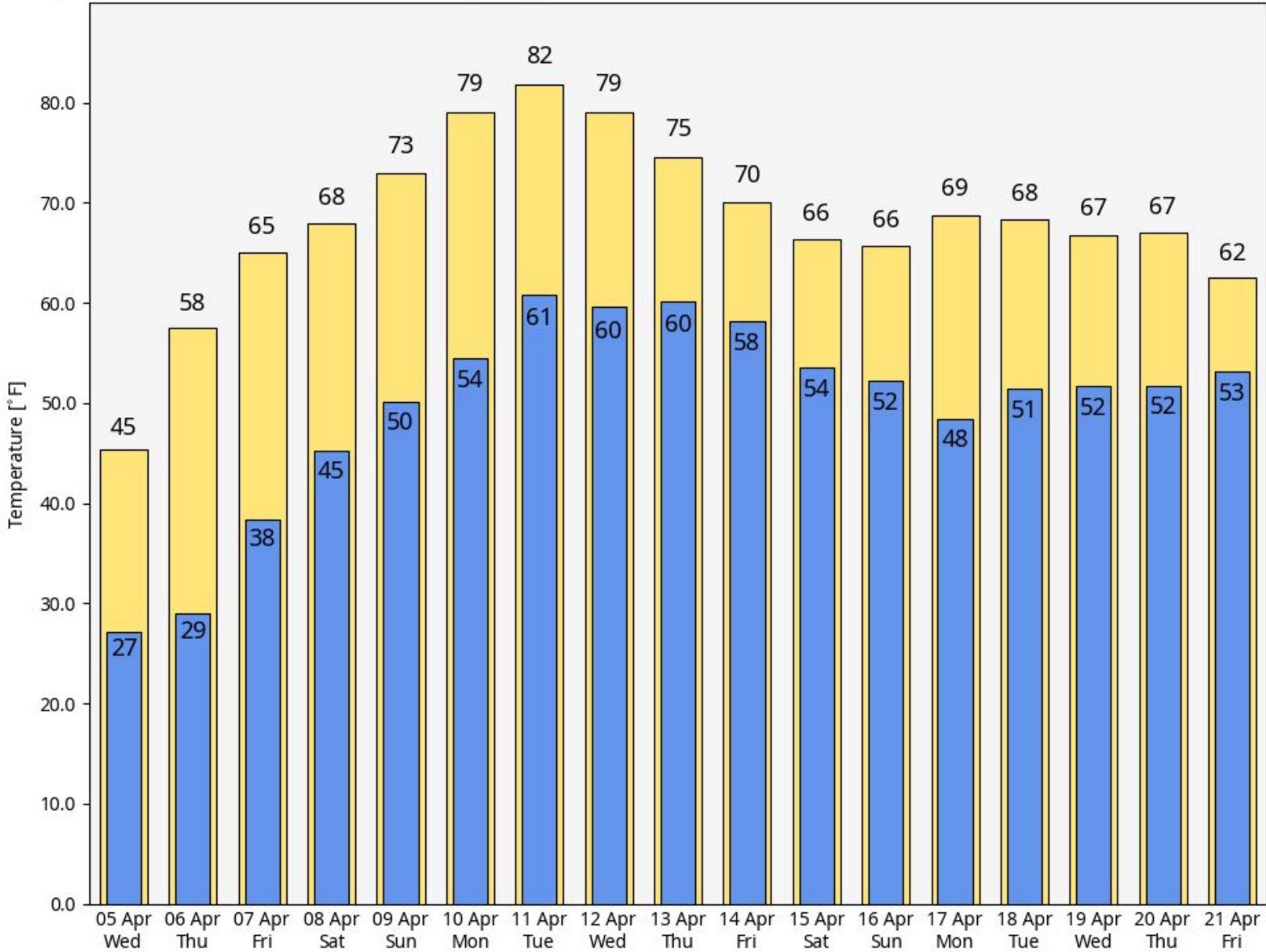


Temperature Forecast

For Omaha, NE - from GEFS Model

April 5, 2023
10:30 AM

GEFS Ens 0.5° Init 06z 5 Apr 2023 • Daily High/Low Temperature (°F)
Eppley Airfield • KOMA [41.3032°N, 95.8941°W, 984ft elev]
Grid: [41.5°N, 96°W, 1134ft elev, 14.67mi to the NNW (338.1)°]



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Omaha/Valley, NE



Summary Slide

April 5, 2023
10:30 AM

- Except for northeast Nebraska, snowfall and precipitation for most of the forecast area has been below normal.
- Extreme to exceptional drought continues across some of the local area.
- Despite the moisture deficits, The Accumulated Winter Season Severity Index (AWSSI) is Moderate for both Omaha and Lincoln, and Average for Norfolk.
- We are now past our “average” last snowfall for the season. However, latest snows extend well into May!
- The 6-10 and 8-14 day climate temperature outlooks call for a very high chance of above normal temperatures, which is supported by the 15-day forecast for Omaha.

